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ABSTRACT

The purpose of this research study was to determine if the implementation of a social skills curriculum would have a positive effect on the performance of severely emotionally or behaviorally disordered students (SEBD). The program studied was the Boys' Town Educational Model (BTEM). Student performance was defined in terms of reading recognition and comprehension, mathematics, and spelling. Student behavior was defined in terms of suspensions, restraints, and time-outs/seclusions. Subjects were 21 students aged 11 to 19 (16 black males, 4 white males, and 1 black female) classified as SEBD from the Atlanta (Georgia) area. Implementation of the BTEM had a significant effect in decreasing the total number of restraints of the subjects. Its use appeared effective in improving the academic scores of students classified as SEBD while decreasing the number of time-outs/seclusions. Results support further study of the BTEM as a way to improve student performance through a structured classroom management approach. Seven appendixes present tables of data about student achievement and behavior. (Contains 7 tables and 21 references.) (SLD)

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The Effect of a Social Skills' Curriculum on Student Performance.

Jason E. Doughty

EDL 900 Research Project

Winter and Spring Quarter 1997

Dr. Clete Bulach, Advisor

Presented at the Third Annual Research Colloquium

State University of West Georgia

Carrollton, Georgia

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The Effect of a Social Skills' Curriculum on Student Performance.

Jason E. Doughty

Dr. Clete Bulach
State University of West Georgia
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ABSTRACT

Purpose of Research

The purpose of this research study was to determine if the implementation of a social skills' curriculum would have a positive effect on the student performance of severely emotionally and/or behaviorally disordered (SEBD) students. The social skills' program studied was the Boy's Town Educational Model (BTEM). Student performance in terms of academics was defined as the reading recognition (RR), reading comprehension (RC), mathematics (MA), and spelling (SP) scores obtained by the Peabody Individual Achievement Test - Revised (PIAT-R). Student performance in terms of behavior was defined as the numbers of suspensions, restraints, and time-outs/seclusions of the subjects.

Theoretical Framework

Disruptive behavior in the classroom generally has a negative effect on student classroom performance. SEBD classrooms are subject to classroom disruptions. Implementing a program to train students in appropriate social skills should decrease classroom disruptions. It is important to determine the usefulness of a social skills' program. Investigating the effects of the BTEM on student performance should confirm the use of the BTEM with SEBD students.

Procedures

The subjects for this study consisted of 21 students attending the Flat Shoals Center of the South Metro Psychoeducational Program. The subjects were students classified as SEBD from south Atlanta City Schools, south Fulton County Schools, and Clayton County Schools. The subjects consisted of 16 black males, 4 white males, and 1 black female. The ages of the subjects ranged from 11 to 19 with a mean age of 15 years and 1 month. Each subject was administered the PIAT-R in the spring of the 1995-1996 school year as the pre-test and the spring of the 1996-1997 school year as the post-test. The PIAT-R served as the measure of academic performance. Suspensions, restraints, and time-outs/seclusions were recorded for each school year during the dates of July 1, 1995 to March 1, 1996 as the pre-test and July 1, 1996 to March 1, 1997 as the post-test.

Data Analysis

The pre- and post-tests were evaluated using a t-test for correlated groups. The spring 1996 PIAT-R scores served as the pre-test for academic achievement. The spring 1997 PIAT-R scores served as the post-test for academic achievement. Suspensions, restraints, and time-outs/seclusions were recorded for both years. The pre- and post-tests were analyzed to determine if the BTEM had an effect on student performance.

Results/Conclusion

The implementation of the BTEM had a significant effect in decreasing the total number of restraints of the subjects. The author concluded that the use of the BTEM has proven to be effective in improving academic scores of students classified as SEBD while decreasing the numbers of time-outs/seclusions and restraints. The results of this study prove the merit of further study of the implementation of the BTEM.

Significance of the Research

The BTEM has proven to have an effect on decreasing disruptive behavior. The implementation of the BTEM may be a solution for increasing the student performance of many SEBD students. By providing a sound structured classroom management approach teachers and administrators will be able to focus on remediating academic deficiencies.

The Effect of a Social Skills' Curriculum on Student Performance.

Introduction

Do well-mannered students achieve better in school? Kain, Downs, and Black (1988) stated that a person's success is greatly dependent on their use of social skills. The authors further stated that the ability to get along with others is directly related to the success of most people. Our society today produces students who are very technologically advanced. Students and adults can be very successful completing school and job assignments by relying on computers or other forms of technology. Kain, et al. stated the reliance on technology and machines has created a generation of students with very poor social skills. Social skills refer to the life tools or skills needed to be successful in society (Kain, et al. 1988). Students entering public schools today lack the basic social skills needed to be successful. Many educators feel that the teaching of social skills should take place in the home. However with the current trends of our society, many parents do not have the time or luxury to teach and model the appropriate social skills to their children. Students with disabilities in particular have significant deficits in the use of appropriate social skills (Ciechalski & Schmidt, 1995). These deficits may have resulted due to a lack of a structured social skills' curriculum.

Statement of Problem

As stated above, students with disabilities appear to have particular trouble relating to peers and adults. Students classified as severely emotionally and or behaviorally disordered (SEBD) experience chronic and significant deficits in the area of

social skills. Many SEBD students have not had the opportunity or guidance to learn or practice appropriate social skills. Many SEBD students come to school with skills that have allowed them to survive on the streets or in their local neighborhoods. These "street" skills are not acceptable in classroom settings. Public schools have not prioritized the teaching of a systematic social skills' curriculum. Therefore, SEBD students are not exposed to the skills necessary to be successful in a public school setting. Consequently, SEBD students are referred to more restrictive environments due to chronic, inappropriate classroom behaviors. Many times these behaviors are related to deficits in the students' acquired social skills.

Most students classified as SEBD also function below their chronological or assigned grade levels. One reason SEBD students have deficits in academic achievement may be due to a lack of appropriate social skills' training. Furst, Terracina, Criste, Dowd, and Daly (1995) presented the possibility of impaired academic performance being linked to poorly developed social skills. Students and adults who utilize a consistent form of social skills are generally seen as being more successful in class and life (Kain, et al. 1988). There is conflicting research in the value of social skills' training. Consequently, there is a need to find a program that has a positive effect on student performance.

Purpose of the Study

The purpose of this study was to determine if the implementation of a social skills' training program would have a positive effect on the student performance of SEBD students. The social skills' training utilized was the Boy's Town Educational Model

(BTEM). The BTEM is a social skills' curriculum consisting of a structured approach to classroom management and an office referral and intervention component for administrators to address behaviors too difficult or violent to be handled in the classroom (Furst, et al. 1995). Student performance in terms of academics was defined as the reading recognition, reading comprehension, mathematics, and spelling scores obtained from administration of the Peabody Individual Achievement Test - Revised (PIAT-R). Student performance in terms of behavior was defined as the number of suspension days, the number of physical restraints, and the number of time-outs or seclusions.

Significance of the Study

The implementation of a social skills' program should enable SEBD students to improve their academic performance. The social skills' training program should reduce the amount of off-task behavior in the classroom. The reduction in classroom disruptions should allow students to focus more attention and energy on improving academic skills. A classroom with minimal disruptions should also allow teachers more time to better present lessons to their students. Decreasing incidents of classroom disruption should allow teachers to remediate academic deficiencies of their students. The increased time focused on academics should increase academic scores. If academic scores improve with the implementation of a social skills program, the need for a structured social skills' curriculum should be proven.

Literature Review

Social skills' programs have been studied by different researchers to determine their usefulness in a school setting. Studies have been conducted to determine if the

structured presentation of a social skills' program has an effect on the performance of students. Performance of students can be measured in terms of academic achievement, peer acceptance, social status, etc. This study investigated the possibility of an influence between the presentation of one social skills' program and its effect on student performance. The following pertinent studies involving the use of social skills' training programs were reviewed.

Cartledge and Milburn (1978) reviewed the necessity of teaching social skills in the classroom. The authors cited several studies that demonstrated a relationship between academic achievement and social behaviors. The authors cited studies that identified behaviors such as independence, attention, persistence to task, self-control, compliance to teacher demands, and ability to follow directions that directly correlated to improved academic achievement. Cartledge and Milburn cited the work by Feldhusen, Thurston, and Benning (1967, 1970) which studied the longitudinal relationship between behavior and achievement. In Feldhusen, et al.'s work, groups of third and sixth grade students were nominated by their teachers for displaying aggressive and disruptive behavior. The subjects' achievement scores were significantly lower in mathematics and reading. The same subjects' scores were reviewed five years later. There were still deficits in both academic areas. Feldhusen et al. stated that the failure and frustration of these students could be linked to deficit areas in social skills. They identified the need to facilitate social skills to improve academic achievement of students. Cartledge and Milburn concluded their work by stating behaviors such as attending, remaining on task,

volunteering answers, complying with teacher requests, and interacting with teachers and peers have shown to have a positive influence on student learning.

Meadows, Neel, Parker, and Timo (1991) attempted to validate the use of social skills' programs for students with behavioral disorders. Special education directors in Washington, Iowa, and Colorado solicited volunteers from teachers who taught serious behavioral disordered students in their districts. The subjects were recruited from urban, suburban, and rural areas. There were 383 subjects divided as follows: 70 regular education students, 69 students with behavioral disorders, 76 regular education teachers, 54 parents of regular education students, and 33 parents of students with behavioral disorders. Each subject was asked to complete the Adolescent Social Skills Survey. The results of the study indicated that the 48 social skills addressed in the Adolescent Social Skills Survey were viewed by the subjects as important. However, behaviorally disordered students generally ranked the social skills lower than their regular education counterparts. The authors concluded that for a social skills' program to be truly effective the skills being taught must be seen as important and meaningful to the students receiving instruction. The authors stressed that social skills' programs should emphasize skills that make functional differences in student behavior.

Wiener, Harris, and Shirer (1990) evaluated the correlation between academic achievement and social behavior as they relate to peer status in learning disabled children. The subjects were 90 nine to twelve year old learning disabled students. The control group consisted of 94 non-learning disabled children. Both groups were

evaluated using the Weschler Intelligence Scale for Children - Revised (WISC-R), the Wide Range Achievement Test - Revised (WRAT-R), and the Woodcock Reading Mastery Test (WRMT) to determine an intelligence quotient (IQ) and academic achievement scores. Social behavior was assessed using the Social Behavior Nomination Scale. The authors found that IQ and academic achievement were significantly correlated with peer preference. However, there were no significant differences between the correlation of IQ and academic achievement between the learning disabled and non-learning disabled populations. There were also no significant positive correlations between achievement test scores and peer preference for both populations.

Ciechalski and Schmidt (1995) investigated the effects of social skills' training on students with exceptionalities. The authors stated that academic gains of students with exceptionalities would improve if more students were mainstreamed. They stated that students with disabilities often lack the necessary social skills to be successful in a mainstreamed setting. The subjects of this study consisted of the entire fourth grade population in two social studies classes. The control and experimental groups were from the same community and were representative of both high and low socioeconomic status. Each student was given a pre- and post-test on the Self-Esteem Inventory (SEI) and the Behavioral Academic Self-Esteem-Rating Scale (BASE). The authors then implemented the Skillstreaming the Elementary School Child social skills' curriculum. The authors concluded that the treatment group significantly improved their social attraction factor as measured by BASE. The implementation of the social skills' curriculum allowed students to cooperate more in the classroom thus creating a more accepting, beneficial

learning environment. The authors concluded that students who were accepted in a school environment were more apt to be successful in their school, community, and later workplace.

Green, Forehand, Beck, and Vosk (1980) investigated the relationship between social competencies and an academic measure. One hundred and nine third grade students were chosen for this study. Sociometric competencies were measured using the following instruments or exercises: behavioral observations, the Conners Teacher Questionnaire, and the "My Wishing Star" questionnaire. Academic scores were measured using the Metropolitan Achievement Test. The academic scores were determined by averaging the fall and spring test scores. The study found that students who were high academic achievers were more accepted by their peers and less rejected. The authors concluded that students who were seen as academic achievers were more likely to interact appropriately with peers. Students with lower academic achievement were less liked and accepted by their peers.

Cain (1990) investigated the effect a social skills' program had on skills performance, social metacognition, and social acceptance. The subjects in this study consisted of 18 learning disabled and emotionally handicapped junior high school resource students. The social skills' instruction consisted of implementation of ASSET: A Social Skills' Program for Adolescents. The social measures administered to the students consisted of behavioral role play tests and metacognitive interviews. The peers of the subject students were administered the Ohio Social Acceptance Scale to measure social acceptance of the subjects. The results showed significant improvements in the

social domain of the subject students after implementation of ASSET. Cain concluded that the ASSET program was responsible for the changes in skill performance, social metacognition, and social acceptance.

Vandell and Hembree (1994) investigated the relationship between peer social status and friendship to children's social and academic adjustment. The subjects for this study consisted of 326 children from 23 third grade classrooms in seven suburban elementary schools. The subjects were administered sociometric nominations. The nominations were not rank-ordered. A preference score was calculated by subtracting the number of negative responses from positive ones. Information was also obtained from parents and teachers as to the social acceptance of each student. Academic achievement was measured by reviewing report card grades and standardized test scores from the Iowa Test of Basic Skills and the Cognitive Abilities Test. The results of this study showed classroom friendships were a positive predictor of childrens' academic competence and socio-emotional adjustment. Students who were rejected by their peers had more problematic academic adjustment. The authors did state two possible limitations to the study: the measures of friendship and peer status were not sufficiently independent and the effects between peer relationships and adjustment could not be examined.

Larson (1989) investigated the effect task-related and interpersonal problem-solving training had on increasing school success in high-risk adolescents. The subjects for this study consisted of 48 sixth grade students targeted as high risk for secondary school failure. The subjects were divided into two groups: the first group received the Social Thinking Skills program and the second group served as the control group. The

experimental group received 45 hours of problem-solving training during the final ten weeks of sixth grade. The control group received a placebo "values clarification" program. Subjects in the intervention group received more A, B, and C grades and less D and F grades than the students in the control group. The author determined that the intervention group's academic gains were directly attributed to the decrease in classroom removals and the acquisition of enhanced task-related behavior. The intervention group experienced more on-task behaviors that facilitated an increased amount of time devoted to academic learning. The author did stipulate that the academic grades did not reflect if actual learning took place. The author further stipulated that the improvement in report card grades could be attributed to learned classroom survival skills.

Wooster (1986) investigated the effect the teaching of a social and communication skills' program would have on reading attainment and self-concept scores. The author attempted to determine if an improved social climate would facilitate a more collaborative learning environment. Wooster measured the reading ability of 26 eight year old boys and girls after they had been exposed to a structured social skills' and communication program. This data was then compared to a matched sample of students in another school setting. The reading ability of the students was tested by using the Primary Reading Test - Level 2. The experimental group showed a rise in reading ability after the exposure to the structured exercises in social and communication skills. Wooster concluded that the increase in reading scores was attributed to a more positive

learning environment. One limit to the study may have been the training level of the teachers of both groups. Wooster stated that if the control group's teacher had counseling experience the control group may have seen comparable results.

Trapani and Gettinger (1989) evaluated the effectiveness of social skills' training and cross-age tutoring for improving academic achievement and social communication for boys with learning disabilities. The subjects were 20 fourth through sixth grade boys with learning disabilities. The subjects were assigned to one of three groups: group one received the social skills' training and tutoring components, group two received only the social skills' training, and the third group or control group received neither component. Academic achievement was measured by administering the Test of Written Spelling. Social behaviors were measured by the Walker Problem Behavior Identification Checklist. The experimental group showed significant improvement in academic achievement and social communication. The authors viewed the tutoring program as the link between the social skills' program and the generalization of skills into natural settings. The social skills' training was seen as providing the pro-social behaviors essential for the exchange between two persons. The authors concluded cross-age tutoring and social skills' training were viable methods for increasing academic achievement and social communication skills.

The previous studies reviewed showed a relationship between the use of social skills' programs and academic achievement. The following studies showed no relationship between social skills' programs and academic achievement. Hart (1996)

attempted to replicate the previous study of Trapani and Gettinger (1989). Hart investigated the effect of cross-age tutoring and social skills training on academic achievement and social behaviors of girls with learning disabilities. Eleven girls served as the subjects for this research. The subjects were randomly assigned to one of three groups: four girls were instructed in the use of appropriate social skills and were given the task of tutoring non-learning disabled girls two grades lower in spelling, the second group of four girls received social skills' training only, and the third group consisted of three girls serving as the control group. Hart's hypothesis revolved around the premise that social skills' training and cross-age tutoring were beneficial to learning disabled girls. The results did not show a statistically significant treatment effect among the groups. The author did report that individual cases showed support for the hypothesis. Hart stated that the sample was not large enough to generalize results to the population of learning disabled girls.

Robinson (1985) investigated the effect three intervention strategies had on the attrition rate of high school dropouts. The study reviewed the relationship between tutoring, achievement motivation training, and social skills' training as they relate to attrition. The study attempted to seek a relationship between the above intervention strategies and academic factors such as auditory vocabulary and reading comprehension. The subjects for this study consisted of 64 sixteen year old or older ninth and tenth grade students identified as likely to drop out of school. The author found no relationship between the intervention strategies and academic performance. However, the study did show social skills' training had a significant effect on school attendance.

Brickman (1995) conducted a study of the effects of a social skills' training program on social skills, self-concept, peer acceptance, and academic achievement of early adolescents. This cognitive-behavioral social skills' training program was implemented in a primary preventive manner. The subjects for this study were 89 seventh grade students of a small rural/suburban middle school. Each of the subjects was pre- and post-tested on self-report measures of self-concept, social skills, peer acceptance, and academic achievement. The results of the pre-test were ranked according to their scores on the Social Skills Rating Scale, Student form, Secondary level. The subjects were then divided into nine groups: five groups received the social skills' training program and four groups were given topics to discuss from the mental health portion of the New York State seventh grade health curriculum. The groups were randomly assigned group leaders and conditions. Brickman hypothesized that the group receiving the social skills training program would show significantly greater improvement in self-esteem, peer acceptance, perceived social skills, and academic achievement in comparison with the control group. Each analysis completed by the author did not suggest a significant effect of the social skills' program.

Dougherty (1989) conducted a study to investigate the effects of a social skills' training program on the academic performance of underachieving adolescents. The subjects of this study consisted of 39 underachieving sixth, seventh, and eighth grade students. The subjects were randomly assigned to one of three groups: a control group and two treatment groups. One treatment group received social skills' training from two co-facilitators in the techniques of role-playing, modeling, coaching, and

practice. The second treatment group received the same training but also included their parents in concurrent group sessions. Dougherty hypothesized that the treatment groups would show more positive gains in academic areas such as grades, test scores, and classroom attendance. The author further hypothesized that the treatment group with concurrent parent sessions would show superior academic gains. The results of the study did not support these hypotheses. Dougherty found no relationship between the social skills program and academic achievement. The author also discovered that there was a decrease in the subjects' social skills from the pre- to post-test.

Fahringer (1996) investigated the effects of a social skills' training program on the writing skills of learning disabled middle school students. The sample included 57 students in grades six through eight in a predominantly middle class school in an urban setting in south Florida. The authors performed a pre- and post-test using three separate measures. Writing was measured by the Test of Written Language-2 (TOWL-2) and the Woodcock Psychoeducational Battery Achievement and Supplemental Tests. Social skills of the subjects were assessed by the Social Skills' Rating System. The results did not show a significant relationship between the improvement in writing scores and the implementation of a social skills' program. Writing achievement was attributed to syntactic maturity. Fahringer concluded there was no relationship between social skills' programs and writing achievement.

Kaufman (1995) conducted a study reviewing the effects of attentional and social skills' training on academic achievement. The author attempted to show a link between programs designed to improve attentional and social skills and academic achievement

gains. The subjects for this study were 23 high-achieving fifth and sixth grade students participating in an after school enrichment program. The subjects were assigned to one of three groups: attentional training, social skills' training, and a control group. Pre- and post-test measures of attention, social skills, and academic achievement were administered to each subject. Kaufman found no significant differences between the groups on the post-test training measures. The author concluded that the interventions were ineffective in improving attention, social skills, or academic achievement.

Bishop (1989) evaluated the Boy's Town Motivation System (BTS) as it was implemented in a public school setting. Bishop sought to establish a relationship between the implementation of the BTS and increases in academic performance for emotionally/behaviorally disordered (EBD) students. The subjects for this study consisted of students assigned to four programs for EBD students: two resource EBD programs (one high school and one elementary school) and two self-contained severe-EBD programs (one high school and one elementary school). The control group consisted of two resource EBD programs (one high school and one elementary school). Academic achievement for the subjects was measured using the Three R's Achievement Test and curriculum based assessment. The results of this study indicated that there were significant differences between groups in on-task behavior. There were no differences found in academic performance of the students.

The literature review provided direction for this study. Two studies (Cartledge & Milburn, 1978 & Meadows, et al., 1991) stressed the relevance of teaching social skills in the classroom setting. Five studies (Ciechalski & Schmidt, 1995; Green, et al., 1980;

Vandell & Hembree, 1994; Wiener, et al., 1990; & Cain, 1990) focused on the student's social competence, peer's attitudes, and their relationship to academic achievement. Four studies reviewed found there to be a relationship between the implementation of a social skills' program and academic achievement (Larson, 1989; Wooster, 1986; Trapani & Gettinger, 1989; & Hart, 1996). The majority of studies reviewed did not support the theory that the implementation of a social skills' program would have an effect on academic gains (Robinson, 1985; Brickman, 1995; Dougherty, 1989; Fahringer, 1996; Kaufman, 1995; & Bishop, 1989).

In reviewing this literature, the author was faced with several questions. What effect does a social skills' program have on the student performance of severely emotionally/behaviorally disordered students? What are the benefits presented by implementing a social skills' program that should effect student performance? The research reviewed presents quite a bit of conflicting evidence. Some studies reviewed showed the implementation of a social skills' program to have a positive effect on student performance. Some studies could find no relationship between the implementation of a social skills' program and student performance.

The literature review presents conflicting information. However, the BTEM has proven to be worthy of further study (Bishop, 1989). The implementation of the BTEM should reduce the off-task behaviors in the classroom setting. The BTEM should also improve the social acceptance and self-esteem of severely emotionally/behaviorally disordered students. The BTEM should allow teachers more time to adequately instruct

their students. The combination of the above mentioned factors should facilitate the opportunity for an increase in academic achievement and a decrease in disruptive student behavior. The hypotheses of this study were as follows:

1. The implementation of the BTEM would increase reading recognition (RR) scores as measured by the PIAT-R.
2. The implementation of the BTEM would increase reading comprehension (RC) scores as measured by the PIAT-R.
3. The implementation of the BTEM would increase mathematics (MA) scores as measured by the PIAT-R.
4. The implementation of the BTEM would increase spelling (SP) scores as measured by the PIAT-R.
5. The implementation of the BTEM would decrease the number of suspension days of the subjects.
6. The implementation of the BTEM would decrease the number of physical restraints of the subjects.
7. The implementation of the BTEM would decrease the number of time-outs/ seclusions of the subjects.

Methodology

This study was a causal-comparative quantitative study that was longitudinal in nature. The subject sample for this study was a homogeneously matched group. Subjects were chosen based on their assignment to a self-contained severely emotionally/behaviorally disordered program. The subjects were students at the Flat

Shoals Center of the South Metro Psychoeducational Program. The sample subjects were referred to South Metro by their home school systems. Each referral goes through a thorough screening process to determine eligibility and appropriateness for the program. The subjects selected for this study were in attendance in this program for the school years 1995-1996 and 1996-1997. This study reviewed educational testing data obtained by the PIAT-R and the subjects' behavioral performance as recorded through suspension letters, incident reports, and time-out logs.

Subjects

The subjects for this study consisted of 21 students attending the Flat Shoals Center of the South Metro Psychoeducational Program. The Flat Shoals Center serves students who have been classified as SEBD from south Atlanta City Schools, south Fulton County Schools, and Clayton County Schools. South Metro is 1 of 24 such centers across the state of Georgia that serves SEBD students. There were 16 black males (76%), 4 white males (19%), and 1 black female (5%). The ages of the subjects ranged from 11 to 19. The subjects mean age was 15 years and 1 month. The median age of the subjects was 15 years and 3 months. They live in primarily urban and suburban areas of Atlanta, Georgia. Fifteen of the subjects were from one parent homes. Five subjects lived with both parents. One subject was in a foster home.

Instrumentation

Academic achievement was measured using the PIAT-R. The PIAT-R is an educational assessment designed to measure the grade equivalent scores on six sub-test

areas: general information, reading recognition, reading comprehension, mathematics, spelling, and writing. For this study, the test areas of reading recognition (RR), reading comprehension (RC), mathematics (MA), and spelling (SP) were analyzed. Split-half reliability coefficients for the PIAT-R were in the 0.90s indicating a high degree of reliability for the subtests. The PIAT-R's coefficients of reliability on Kuder-Richardson resulted in coefficients clustering in the mid to low 0.90s, indicating a high degree of content homogeneity. Test-Retest reliability established coefficients in the low to upper 0.90s. This indicated substantial agreement between scores on first and second testings. Item response theory reliability coefficients for the subtest ranged from the mid to high 0.90s indicating strong evidence of the reliability of the PIAT-R (Markwardt, 1989). The content validity of the PIAT-R is established by evidence of the extensive developmental process and the Kuder-Richardson and split-half reliability estimates. Construct validity was established by comparing the PIAT-R to the original Peabody Individual Achievement Test and the Peabody Picture Vocabulary Test - Revised (Markwardt, 1989).

Procedures

This study proposed to evaluate the effectiveness of the BTEM. The BTEM is a structured social skills' program designed to equip students with the necessary skills to be successful in different educational and life settings. The BTEM is based on the following sixteen social skills: how to follow instructions, how to accept criticism or consequence, how to accept "no" for an answer, how to greet someone, how to get the teacher's attention, how to make a request, how to disagree appropriately, how to give negative

feedback, how to resist peer pressure (or say "No"), how to apologize, how to engage in a conversation, how to give a compliment, how to accept a compliment, how to volunteer, how to report peer behavior, and how to introduce yourself (Dowd et al., 1993). The BTEM was implemented at the Flat Shoals Center beginning in the fall of 1996. The previous behavior management systems in use were response-cost level systems with very little emphasis on social skills. The implementation of the BTEM served as the independent variable for this study.

Academic achievement was measured using the PIAT-R. Each student attending the Flat Shoals Center is administered a fall and spring educational assessment. The subjects observed for this study were administered the PIAT-R. The academic pre-test for this study was the spring PIAT-R scores obtained during the 1995-1996 school year. The post-test was the spring PIAT-R scores obtained during the 1996-1997 school year. The spring educationals were administered during the months of January, February, March, and April. Academic achievement scored by the PIAT-R served as dependent variables for this study.

The subjects' incidents of disruptive behavior were gathered by reviewing data collected on each subject. Pre-test data was collected for the 1995-1996 school year during the time period of July 1, 1995 to March 1, 1996. Post-test data for the 1996-1997 school year was collected from July 1, 1996 to March 1, 1997. A file was maintained for each subject which included incident reports documenting restraints involving and

suspension letters for each subject. Time-out logs were reviewed to compile the total number of time-outs/seclusions for each subject.

Data Analysis

The academic scores achieved from the PIAT-R were analyzed using a t-test for correlated groups. Data collected on the total number of suspension days, restraints, and time-outs/seclusions for each school year was analyzed using a t-test for correlated groups. The t-test for correlated groups will determine if there was a difference in student performance as a result of the implementation of the BTEM. The measured academic scores and incidents of disruptive behavior served as the dependent variables for this study.

Results

The research data on the academic hypotheses consisted of spring PIAT-Rs for the 1995-1996 and 1996-1997 school years. The research data for the behavioral hypotheses consisted of suspension letters, incident reports, and time-out logs from the subject's files. Each academic and behavioral area is addressed in the following sections.

Reading Recognition

The 21 subjects achieved a mean grade equivalent of 3.948 during the 1995-1996 school year. A mean grade equivalent score of 4.0 was achieved during the 1996-1997 school year. This produced a mean gain of approximately one month which computed to a 1% increase. Ten of the 21 subjects (48%) showed a mean gain of 5.8 months. The gain recorded for these subjects ranged from two months to one year and four months. Six

subjects (29%) showed a mean loss of 7.8 months. The loss recorded for these subjects ranged from two months to one year and nine months. Five of the subjects (24%) showed no gain or loss. A t-test performed on the above raw data resulted in a t-score of 0.048 ($p = 0.96195$). Hypothesis one which stated that the implementation of the BTEM would increase reading recognition scores was not supported. A significant difference did not occur. (See Table 1 below. For a complete listing of data see Appendix A.)

Table 1

A Comparison of Reading Recognition Scores Obtained Prior to and After the Implementation of the BTEM

Treatment	Mean Score	Standard Deviation	t-score	Probability
Prior	3.948	3.446	0.048	0.96195
After	4.000	3.454		
n = 21				
df = 20				

Reading Comprehension

The 21 subjects achieved a mean grade equivalent of 3.924 during the 1995-1996 school year. A mean grade equivalent score of 4.814 was achieved during the 1996-1997 school year. This produced a mean gain of approximately nine months which computed to a 23% increase. Thirteen subjects (62%) had a mean gain of one year and 7.1 months. The range of gain for these subjects was from one month to three years and eight months. Six subjects (30%) had a mean loss of 5.8 months. The loss ranged from one month to

two years. Two subjects (8%) showed no gain or loss. A t-test performed on the above raw data resulted in a t-score of 0.892 ($p = 0.37751$). Hypothesis two which stated that the implementation of the BTEM would increase reading comprehension scores was not supported. A significant difference was not established as a result of implementing the BTEM. (See Table 2 below. For a complete listing of data see Appendix B.)

Table 2

A Comparison of Reading Comprehension Scores Obtained Prior to and After the Implementation of the BTEM

Treatment	Mean Score	Standard Deviation	t-score	Probability
Prior	3.924	2.469	0.892	0.37751
After	4.814	3.717		
n = 21				
df = 20				

Mathematics

The 21 subjects achieved a mean grade equivalent of 4.524 during the 1995-1996 school year. A mean grade equivalent score of 5.224 was achieved during the 1996-1997 school year. This produced a mean gain of approximately seven months which computed to a 15% increase. Eighteen subjects (86%) showed a mean gain of one year and two months. Gains ranged from one month to four years and one month. Three subjects (14%) showed a mean loss of one year and eight months. The losses ranged from four months to three years and eight months. A t-test performed on the above raw data

resulted in a t-score of 0.955 (p = 0.34534). Hypothesis three which stated that the implementation of the BTEM would increase mathematics scores was not supported. A significant difference did not occur. (See Table 3 below. For a complete listing of data see Appendix C.)

Table 3

A Comparison of Mathematics Scores Obtained Prior to and After the Implementation of the BTEM

Treatment	Mean Score	Standard Deviation	t-score	Probability
Prior	4.524	2.037	0.955	0.34534
After	5.224	2.568		
n = 21				
df = 20				

Spelling

The 21 subjects achieved a mean grade equivalent of 4.062 during the 1995-1996 school year. A mean grade equivalent score of 4.557 was achieved during the 1996-1997 school year. There was a measured mean gain of approximately five months which computed to a 12% increase. Twelve subjects (57%) showed a mean gain in spelling of one year and 1.7 months. The spelling gains ranged from two months to five years and four months. Five subjects (24%) showed a mean loss of 7.2 months. Losses ranged from two months to one year and three months. Four subjects (19%) showed no gain or loss. A t-test performed on the above raw data resulted in a t-score of 0.441 (p = 0.66166).

Hypothesis four which stated that the implementation of the BTEM would increase spelling scores was not supported. A significant difference did not occur. (See Table 4 below. For a complete listing of data see Appendix D.)

Table 4

A Comparison of Spelling Scores Obtained Prior to and After the Implementation of the BTEM

Treatment	Mean Score	Standard Deviation	t-score	Probability
Prior	4.062	3.278	0.441	0.66166
After	4.557	3.806		
n = 21				
df = 20				

Suspensions

The 21 subjects were suspended for a total of 45 days during the 1995-1996 school year. This computed to a mean of 2.143 suspension days per subject. During the 1996-1997 school year, the 21 subjects were suspended for a total of 80 days. This computed to a mean of 3.810 suspension days per subject. This computed to a mean gain of 1.67 days of suspension per subject. This amounted to a 78% increase in suspension days. Twelve of the subjects (57%) showed an increase in the number of suspension days. The mean increase in suspension days for these 12 subjects was 4.16 days. Six of the 21 (29%) subjects showed a decrease in suspension days. The mean decrease is suspension days for these subjects was 2.5 days. A t-test performed on the above raw data resulted in

a t-score of 1.683 ($p = 0.10013$). Hypothesis five which stated that suspension days would decrease after the implementation of the BTEM was not supported. A significant difference was not established as a result of implementing the BTEM. (See Table 5 below. For a complete listing of data see Appendix E.)

Table 5

A Comparison of Suspension Days Prior to and After the Implementation of the BTEM

Treatment	Mean Score	Standard Deviation	t-score	Probability
Prior	2.143	2.144	1.683	0.10013
After	3.810	3.874		
n = 21				
df = 20				

Restraints

The 21 subjects were restrained for a total of 265 incidents for a total of 2,553 minutes during the 1995-1996 school year. This computed to a mean of 12.619 restraints per subject with the average restraint lasting 9.6 minutes. During the 1996-1997 school year, the 21 subjects were restrained for a total of 65 incidents for a total of 786 minutes. This computed to a mean of 3.095 restraints per subject with the average restraint lasting 12.1 minutes. This data resulted in a 75% reduction in the number of restraints and a 69% reduction in the total time spent in restraints. Twelve of the 21 subjects (57%) experienced a reduction in the total number of restraints. Seven of the 21 subjects (33%) experienced an increase in restraints. Two of the 21 subjects (10%) experienced no

increase or decrease in the total number of restraints. The subjects experienced a mean decrease of 9.52 restraints during the treatment period. However, a 21% increase in the average time per restraint was established. A t-test performed on the above raw data resulted in a t-score of -2.107 ($p = 0.04148$). Hypothesis six which stated that the number of restraints would decrease after the implementation of the BTEM was supported. A significant difference was established as a result of the implementation of the BTEM. (See Table 6 below. For a complete listing of data see Appendix F.)

Table 6

A Comparison of Restraints Prior to and After the Implementation of the BTEM

Treatment	Mean Score	Standard Deviation	t-score	Probability
Prior	12.619	19.882	-2.107	0.04148
After	3.095	3.676		
n = 21				
df = 20				

Time-outs/Seclusions

The 21 subjects were assigned time-out/seclusion for a total of 446 times for a total of 11,793 minutes during the 1995-1996 school year. This equated to a mean of 21.24 time-outs/seclusions per subject with a mean of 26.44 minutes per time-out/seclusion. During the 1996-1997 school year, the subjects were assigned time-out/seclusion for a total of 266 times for a total of 6,667 minutes. This data computed a mean of 12.67 time-outs/seclusions per subject with a mean of 25.06 minutes per time-

out/seclusion. Twelve of the 21 subjects (57%) experienced a mean decrease in time-outs/seclusions of 22.92. Eight of the 21 subjects (38%) experienced a mean increase in time-outs/seclusions of 11.88. The data showed a 40% decrease in the number of time-outs/seclusions and a 43% decrease in the total number of time spent in time-out/seclusion. There resulted a 5% reduction in the average time spent in time-out/seclusion per subject. A t-test performed on the above raw data resulted in a t-score of -1.432 ($p = 0.1600$). Hypothesis seven which stated that the number of time-outs/seclusions would decrease after the implementation of the BTEM was not supported. A significant difference did not occur. (See Table 7 below. For a complete listing of data see Appendix G.)

Table 7

A Comparison of Time-outs/Seclusions Prior to and After the Implementation of the BTEM

Treatment	Mean Score	Standard Deviation	t-score	Probability
Prior	21.238	24.162	-1.432	0.16000
After	12.667	11.536		
n = 21				
df = 20				

Discussion

The results of this study were promising. There were academic increases and a reduction in disruptive behavior. However a significant relationship could only be established between the implementation of the BTEM and the number of restraints. Although there were increases in student performance, this study is faced with several limitations which will be discussed in the following paragraphs.

Limitations

Maturation could have been a primary limitation to this study. The subjects selected for this study were in attendance at the program for the past two school years. During that time period the natural occurrence of maturation took place. Each subject was one year older and had been exposed to a year's worth of instruction. As the subjects matured physically and mentally their functioning level may have increased. Some academic concepts are not readily understood by younger students. The developmental level of a student could have an effect on their test scores. Younger students are not able to understand abstract concepts as well as older individuals. This may account for the increases and decreases in the academic areas. The reduction in the disruptive behavior may be explained by maturation as well. As SEBD students mature explosive, violent behavior tends to decrease. Maturation may have accounted for the reduction in the incidents of disruptive behavior.

A significant limitation to this study was the sample size of the subjects. There were only 21 subjects who met the criteria for inclusion in this study. These 21 subjects

were in attendance at the program for the entire two years of the study. With the transient nature of the students served it was difficult to include a higher number of subjects. Students who may have had a positive effect on the study were transitioned out of the program due to earning a less restrictive environment. The low number of subjects resulted in insignificant t-scores. A larger number of subjects could have resulted in more significant findings between the independent and dependent variables. These factors together may have limited the validity of this study.

Intellectual functioning of the subjects may have influenced the academic test results as well. The subjects for this study were composed of students with various degrees of intellectual ability. Seven of the 21 subjects (33%) had intelligence scores in the normal range of functioning. Fourteen of the 21 subjects had intelligence scores at or below borderline intellectual functioning: 9 of the 21 subjects (43%) had intelligence scores in the borderline mildly intellectually disabled range; 4 of the 21 subjects (19%) had intelligence scores classifying them as mildly intellectually disabled; and one subject (5%) had an intelligence score that classified him as moderately intellectually disabled. This broad range of intellectual functioning could have had an effect on the academic scores achieved by the subjects.

Subject medication was also a factor that could have influenced the outcome of this study. Eleven of the 21 subjects (52%) were prescribed some sort of medication. Subject diagnoses ranged from attention deficit hyperactivity disorder (ADHD) to paranoid schizophrenia. South Metro attempts to keep a supply of school administered

medication on hand at all times. However there are times when parents fail to fill a prescription and the school supply dwindles. An SEBD student who is not properly medicated may not perform as well in academic areas and may have higher incidents of disruptive behavior. The academic scores achieved on the PIAT-R may not have been accurate reflections of the subjects' actual performance levels. The incidents of disruptive behavior may have increased due to a lack of medication as well.

Another limitation to the study may revolve around the testing instrument. The PIAT-R is the educational assessment used by South Metro. The subjects for this study had taken the PIAT-R a total of at least four times by the spring 1996-1997 testing session. The repetition of testing may have accounted for the academic increase measured. Test apathy may have also influenced test results. The subjects are generally not enthusiastic about completing the PIAT-R. The subjects expressed dislike of the test and boredom during administration. The lack of consistency with test administrators may have affected the testing outcomes. Only one subject (5%) had the PIAT-R administered by the same staff member in consecutive years. Results may have been more significant if a consistent test administrator could have been used to gather data.

Another limitation revolved around the implementation of the BTEM. A basic rule of the BTEM is that teaching staff lower their tolerances of unacceptable behavior. By lowering tolerances, there will be an increase in reported disruptive behavior as

students begin to test limits. Subjects who had tested limits were to be referred to an administrative intervention. Initially there were few staff members completing the interventions. Teachers were not able to refer students as consistently as they would have wanted. Therefore, the full implementation of the BTEM had not effectively taken place. The disruptive behavior continued the entire school year. Another limitation to the significance of this study was the lack of full staff training and dedication of all staff members. All staff members were not trained in the Specialized Classroom Management portion of the BTEM. Therefore some staff members were not comfortable in implementing the program. There was also a lack of dedication from staff members. When immediate success was not witnessed the staff tended to revert to non-BTEM skills. These facts may have influenced the outcome of the study.

Interpretation of Data

The data gained from this research helped the author to evaluate the usefulness of the BTEM in dealing with SEBD students. Reading recognition scores were the mo troublesome data gained from the research. The mean grade equivalent gain increased by only one month. This was disappointing to the author. For the past two years, South Metro has implemented a phonics program with the intent of increasing basic reading levels. The author had assumed that the combination of the phonics program and the implementation of the BTEM would have had a significant effect on reading recognition. This was not the case. Subject medication may have affected the outcome of this section of the study. Reading comprehension scores proved to be the most encouraging data in

the academic performance section. The mean grade equivalent gain computed to be 8.9 months. This number is impressive considering the functioning levels of the subjects and the deficits they presented. The goal of South Metro is to prepare our students to be more successful in later life. The data achieved proved to the author that a basic step in the right direction had taken place.

Mathematics and spelling scores also showed increases. Mathematics and spelling scores showed a mean grade equivalent gain of seven and five months respectively. The gains that resulted were very encouraging. Considering the functioning level of the subjects involved in the study, the seven and five month gains were impressive. The mathematics gain signified a focus on improving the basic functioning levels of the subjects. The implementation of the phonics program may have contributed to the lack of a significant gain in spelling scores. The use of phonics may have reduced the spelling achievement of the subjects.

Student behavior was a key concern in this study. The theoretical framework for this study assumed that the decrease in disruptive behavior would allow instructional staff to have more opportunity to teach. The implementation did have a significant effect on one of the student performance indicators: restraints. Suspensions and time-outs/seclusions were not significantly affected by the implementation of the BTEM.

Suspension data disappointed the author more than any other student performance indicator. The author had anticipated a decrease in the total number of suspension days for the subjects. This was not the case. However after communicating with consultants

from Boy's Town, the author was informed that this phenomenon was predictable. As tolerances lowered, the amount of suspensions would naturally increase. The author determined that the rise in suspension days was indeed accounted for by the lowering tolerances of the program. The increase in suspension days this school year resulted in students being suspended for more serious inappropriate behavior (possession of drugs, assault on staff, destruction of property, etc.).

The number of restraints for the 1996-1997 school year decreased significantly The mean time spent per restraint did increase. The author interpreted this to mean the restraints were being used as a last resort and in more serious situations. This data was indeed encouraging. The use of physical restraint has been reserved as a last resort. The implementation of the BTEM has replaced skills of the instructional staff enabling them to use a more humane method in dealing with disruptive behavior.

The number of time-outs/seclusions did decrease during the treatment period but not at a significant level. The author was encouraged by this data. The decrease in time-outs/seclusions indicates a reduction in the disruptive behavior in the classroom. The use of time-out/seclusion was also used as a last resort. The staff utilized the skills they had learned from the BTEM training to address problematic behavior instead of relying on time-out/seclusion. This fact has noticeably changed the learning environment of the school setting for the better.

Conclusions

The author feels that several conclusions can be reached from analyzing the data obtained. The BTEM has shown it had a significant effect on the reduction in the number of restraints during the treatment period. Although the BTEM could not be significantly linked to academic improvement or the student performance indicators of suspension and time-outs/seclusions, a general improvement in the school community has been witnessed this school year.

Academic performance should always be a priority in a school setting. This is particularly true with students who have varying degrees of intellectual abilities and deficits. The author feels the BTEM can be a means for significant academic improvement once full implementation is in place. This process will take several years to accomplish. Once the full implementation of the program has taken place there should be the opportunity to track academic performance and measure considerable changes. The possibility of adapting a different academic assessment should be explored. The PIAT-R, while reliable, may not accurately measure a student's current functioning level. If testing and test administration can be standardized, a more realistic view of functioning levels will be obtained. The goal of South Metro is to accurately prepare our students for life after they leave our environment. The implementation of the BTEM has proven to have an effect on reducing disruptive behavior. Once disruptive behavior is reduced more opportunities for instruction will take place.

Consistency may have been the greatest challenge faced this school year in the successful implementation of the BTEM. Lack of training, administrative staff, and facilities had a negative impact on the success of the BTEM. The current school year may not be a true representation of the effectiveness of the BTEM. Once full training and implementation have taken place a more realistic study of effectiveness can begin. As stated earlier, Boy's Town consultants have assured the author this is not an overnight experience. Change is difficult for everyone. As a school administrator, the author has experienced several different behavior management programs during his tenure at South Metro. The BTEM is by far the most consistent of the programs. The BTEM empowers teachers and students alike with the skills necessary to survive in different social settings. The ultimate responsibility falls on the student to accept responsibility for his actions and attempt to make real changes in his behavior.

Unfortunately, the results of this study are not generalizable to other SEBD settings or mainstream populations. The sample size was too small to draw any significant conclusions. As the BTEM is fully implemented more subjects will meet the study's inclusion criteria. This should produce more significant results. The author anticipates an additional 25 to 30 subjects in the next school year. Data will continue to be collected and analyzed. The increase in the number of subjects and full training of staff should enable a significant change in student performance.

The author concluded that the use of the BTEM was worthy of further study and consideration. To compare the effectiveness across different settings, the author suggests

a compilation of data from each psychoeducational center using the BTEM. This should provide a more stratified sample of students from different regions. A further step would be to contact Boy's Town and review data collected from their research on the effectiveness of the program. To help generalize data the study should be conducted in a regular school setting. This should prove to be a better indicator of progress for students without disabilities. The current study would prove to be more meaningful if the subjects were grouped according to intellectual ability. The academic performance measured may be the highest score some of the subjects can attain. A standardized educational assessment is needed to assure reliability of data.

The author suggests this study continue in a longitudinal manner. After three to four years of full implementation a better picture of the effect of the BTEM should be illustrated. This time period will allow instructional staff who are not motivated to use the BTEM to find other employment. This would also allow time to generalize procedures while using the program. A parent based portion of the program should be immediately implemented to assure staff that parents understand the BTEM and are willing to reinforce the program in their homes. The SEBD students served by South Metro only attend school for 6.5 hours a day or 32.5 hours a week. The remainder of the week the students are exposed to situations where the social skills learned may not be truly beneficial. A comprehensive parent education portion will allow parents and educators alike to benefit from the structured social skills approach.

The ultimate goal of educators is to provide a meaningful education for their students. The BTEM appears to be the most efficient way to meet the needs of SEBD students in the opinion of the author. The BTEM is a less aversive means of dealing with student behavior. The BTEM guidelines are clear and simple. This simplicity leads to a greater sense of consistency in the program. Continued use of the BTEM is recommended and further study is encouraged.

References

Bishop, G. G. (1989). Evaluation of the Boy's Town Motivation System in a public school setting. Dissertation Abstracts International, 50 (12), 5837B.

Brickman, J. B. (1995). The effects of a preventive social skills' training program on the social skills, self-concept, peer acceptance and academic achievement of early adolescents. Dissertation Abstracts International, 56 (3), 865A.

Cain, A. F. H. (1990). Social skills' training (acceptance, learning disabled, emotionally handicapped). Dissertation Abstracts International, 52 (3), 877-878A.

Cartledge, G. & Milburn, J. F. (1978). The case for teaching social skills in the classroom: A review. Review of Educational Research, 48 (1), 133 - 156.

Ciechalski, J. C. & Schmidt, M. W. (1995). The effects of social skills' training on students with exceptionalities. Elementary School Guidance and Counseling, 29 (3), 217 - 222.

Dougherty, K. C. (1989). Effects of a social skills' training program on the academic performance of underachieving adolescents. Dissertation Abstracts International, 50 (6), 1600A.

Dowd, T., Tobias, L., Connolly, T., Criste, A., & Nelson, C. (1993). Specialized classroom management: A Boys Town approach. Boys Town, Nebraska: Boys Town Press.

Fahringer, M. (1996). The effects of social skills' training on the writing skills of middle school students with learning disabilities. Dissertation Abstracts International, 57

(4), 1559A.

Furst, D. W., Terracina, C., Criste, A., Dowd, T., & Daly, D. L. (1995). Reducing violent and disruptive behavior in elementary schools. Poster session accepted for presentation at the 1995 Annual American Psychological Association Convention, New York City, New York.

Green, K. D., Forehand, R., Beck, S. J., & Vosk, B. (1980). An assessment of the relationship among measures of children's social competence and children's academic achievement. Child Development, 51 (4), 1149 - 1156.

Hart, V. H. (1996). Effects of social skills' training and cross-age tutoring on academic achievement and social behaviors of girls with learning disabilities. Dissertation Abstracts International, 57 (5), 1960A.

Kain, C. J., Downs, J. C., & Black, D. D. (1988). Social skills in the school curriculum: A systematic approach. NASSP Bulletin, 72 (504), 107-110.

Kaufman, L. H. (1995). The effects of attentional and social skills' training on academic achievement. Dissertation Abstracts International, 56 (9), 5173B.

Larson, K. A. (1989). Task-related and interpersonal problem-solving training for increasing school success in high-risk young adolescents. Remedial and Special Education, 10 (5), 32 - 42.

Markwardt, F. C., Jr. (1989). Peabody individual achievement test - revised: Manual. Cedar Pines, Minnesota: American Guidance Services.

Meadows, N., Neel, R. S., Parker, G., & Timo, K. (1991). A validation of social

skills for students with behavioral disorders. Behavioral Disorders, 16 (3), 200 - 210.

Robinson, R. L. (1985). Investigation of three specific intervention strategies to reduce the attrition rate of potential high school dropout. (Volumes I and II: Group guidance, social skills, tutoring, achievement motivation). Dissertation Abstracts International, 47 (6), 2029A.

Trapani, C. & Gettinger, M. (1989). Effects of social skills' training and cross-age tutoring on academic achievement and social behaviors of boys with learning disabilities. Journal of Research and Development in Education, 22 (4), 1 - 9.

Vandell, D. L. & Hembree, S. E. (1994). Peer social status and friendship: Independent contributors to children's social and academic adjustment. Merrill-Palmer Quarterly, 40 (4), 461 - 471.

Weiner, J., Harris, P. J., & Shirer, C. (1990). Achievement and social-behavioral correlates of peer status in LD children. Learning Disability Quarterly, 13 (2), 114 - 127.

Wooster, A. (1986). Social skills' training and reading gain. Educational Research, 28 (1), 68 - 71.

APPENDIX

APPENDIX A

READING RECOGNITION SCORES AS MEASURED BY THE PIAT-R

Subject	1995-1996	1996-1997	Gain or Loss
#1	2.2	1.7	- .5
#2	2.1	2.4	+ .3
#3	K.0	K.0	0
#4	12.9	12.9	0
#5	1.2	1.6	+.4
#6	1.8	1.6	-.2
#7	6.6	4.7	-1.9
#8	2.4	2.2	-.2
#9	4.9	5.3	+.4
#10	3.9	5.2	+1.3
#11	12.9	12.9	0
#12	2.3	2.8	+.5
#13	1.2	1.4	+.1
#14	3.2	4.1	+.9
#15	1.7	1.9	+.2
#16	8.5	8.2	-.3
#17	2.9	2.9	0
#18	1.6	K.0	-1.6
#19	3.8	5.2	+1.4
#20	4.0	4.0	0
#21	2.8	3.0	+.2
Mean	3.948	4.0	+.1
Standard Deviation	3.446	3.454	

t-score = 0.048 p = 0.96195

n = 21
df = 20

APPENDIX B

READING COMPREHENSION SCORES AS MEASURED BY THE PIAT-R

Subject	1995-1996	1996-1997	Gain or Loss
#1	1.7	1.8	+.1
#2	4.6	3.8	-.8
#3	K.0	K.0	0
#4	9.6	12.8	+3.2
#5	1.3	1.6	+.3
#6	1.7	1.9	+.2
#7	3.8	4.4	+.6
#8	4.0	3.7	-.3
#9	4.6	6.5	+1.9
#10	7.0	10.8	+3.8
#11	6.4	6.8	+.4
#12	1.8	1.8	0
#13	1.4	1.2	-.2
#14	5.8	9.6	+3.8
#15	1.8	1.7	-.1
#16	8.5	10.4	+1.9
#17	3.1	4.3	+1.2
#18	2.0	K.0	-2.0
#19	5.6	9.2	+3.6
#20	4.0	5.2	+1.2
#21	3.7	3.6	-.1
Mean	3.924	4.814	+.89
Standard Deviation	2.469	3.717	

t-score = 0.892 p = 0.37751

n = 21
df = 20

APPENDIX C

MATHEMATICS SCORES AS MEASURED BY THE PIAT-R

Subject	1995-1996	1996-1997	Gain or Loss
#1	3.8	4.6	+.8
#2	5.6	7.2	+1.6
#3	K.5	K.7	+.2
#4	5.9	10.0	+4.1
#5	3.7	4.9	+1.2
#6	1.7	1.8	+.1
#7	3.4	4.9	+1.5
#8	5.1	6.4	+1.3
#9	5.1	7.2	+2.1
#10	7.2	7.4	+.2
#11	8.8	9.3	+.5
#12	1.2	K.8	-.4
#13	2.4	3.1	+.7
#14	4.6	6.1	+1.5
#15	3.9	4.6	+.7
#16	5.2	6.3	+1.1
#17	3.7	3.9	+.2
#18	5.0	1.2	-3.8
#19	6.6	7.8	+1.2
#20	4.0	5.1	+1.1
#21	7.6	6.4	-1.2
Mean	4.524	5.224	+.7
Standard Deviation	2.037	2.568	

t-score = 0.955 p = 0.34534

n = 21
df = 20

APPENDIX D

SPELLING SCORES AS MEASURED BY THE PIAT-R

Subject	1995-1996	1996-1997	Gain or Loss
#1	2.5	2.7	+.2
#2	2.2	2.9	+.7
#3	K.9	K.5	-.4
#4	12.9	12.9	0
#5	2.2	2.2	0
#6	1.8	2.1	+.3
#7	3.1	3.7	+.6
#8	2.5	2.8	+.3
#9	6.1	7.3	+1.2
#10	3.2	4.7	+1.5
#11	12.9	12.9	0
#12	2.7	1.9	-.8
#13	1.6	2.0	+.4
#14	3.2	4.5	+1.5
#15	3.4	2.1	-1.3
#16	7.5	12.9	+5.4
#17	2.3	2.6	+.3
#18	1.0	1.0	0
#19	5.8	7.6	+1.8
#20	4.0	3.8	-.2
#21	3.5	2.6	-.9
Mean	4.062	4.557	+.5
Standard Deviation	3.278	3.806	

t-score = 0.441 p = 0.66166

n = 21
df = 20

APPENDIX E

TOTAL NUMBER OF SUSPENSION DAYS

Subjects	1995 - 1996	1996 - 1997	Inc/Dec
#1	1	11	+10
#2	1	1	0
#3	3	0	-3
#4	0	2	+2
#5	6	9	+3
#6	0	5	+5
#7	0	0	0
#8	2	11	+9
#9	2	0	-2
#10	1	0	-1
#11	0	1	+1
#12	2	0	-2
#13	3	7	+4
#14	0	1	+1
#15	1	1	0
#16	3	10	+7
#17	0	3	+3
#18	5	4	-1
#19	7	1	-6
#20	2	5	+3
#21	6	8	+2
Mean	2.143	3.810	+1.67
Standard Deviation	2.144	3.874	

t-score = 1.683 p = 0.10013

n = 21
df = 20

APPENDIX F

TOTAL NUMBER OF RESTRAINTS

Subjects	1995 - 1996	1996 - 1997	Inc/Dec
#1	2	1	-1
#2	7	1	-6
#3	91	1	-90
#4	12	0	-12
#5	29	2	-27
#6	0	3	+3
#7	3	4	+1
#8	0	0	0
#9	7	1	-6
#10	10	1	-9
#11	3	5	+2
#12	17	1	-16
#13	4	3	-1
#14	0	1	+1
#15	6	6	0
#16	9	8	-1
#17	0	1	+1
#18	32	16	-16
#19	26	0	-26
#20	6	7	+1
#21	1	3	+2
Mean	12.619	3.095	-9.52
Standard Deviation	19.882	3.676	

t-score = -2.107 p = 0.04148

n = 21
df = 20

APPENDIX G

TOTAL NUMBER OF TIME-OUTS/SECLUSIONS

Subjects	1995 - 1996	1996 - 1997	Inc/Dec
#1	5	26	+21
#2	9	0	-9
#3	60	21	-39
#4	34	35	+1
#5	90	7	-83
#6	4	3	-1
#7	3	15	+12
#8	16	8	-8
#9	5	3	-2
#10	19	0	-19
#11	21	9	-12
#12	15	0	-15
#13	3	8	+5
#14	1	1	0
#15	9	33	+24
#16	32	17	-15
#17	25	32	+7
#18	14	21	+7
#19	74	6	-68
#20	3	21	+18
#21	4	0	-4
Mean	21.238	12.667	-8.57
Standard Deviation	24.162	11.536	

t-score = -1.432 p = 0.16

n = 21
df = 20